

AMENDMENTS TO THE CLAIMS

Please amend Claims 1, 21, 37, 39, 40, cancel Claims 2-20, 22-36, 38, 41 and 42, and add new Claims 43-60, as indicated below.

1. (Currently Amended) A set of nucleic amplification primers capable of amplifying a kit for the detection of at least one V_H - J_H -*IGH* rearrangement, comprising a forward primer and a reverse primer, wherein said forward primer is selected from the V_H family primers shown in Fig. 3B, or a variant thereof, and wherein said reverse primer is the J_H consensus primer shown in Fig. 3B, or a variant thereof wherein said kit comprises a plurality of forward primers comprising SEQ ID NOs: 1-8, 10-15, 17-20, and 22-28, and at least one reverse primer comprising SEQ ID NO:21.

2. Cancelled.
3. Cancelled.
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10. Cancelled.
11. Cancelled.
12. Cancelled.
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16. Cancelled.
17. Cancelled.
18. Cancelled.
19. Cancelled.
20. Cancelled.

21. (Currently amended) A method for detecting a V_H-J_H *IGH* rearrangement, comprising using ~~one or more sets of primers~~ the kit according to ~~claim~~ Claim 1 in a nucleic acid amplification assay.

22. Cancelled.

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36. Cancelled.

37. (Currently amended) A method for detecting two or more rearrangements, two or more translocations or at least one rearrangement and at least one translocation selected from the group consisting of a V_H-J_H *IGH* rearrangement, a D_H-J_H *IGH* rearrangement, a V_K-J_K *IGK* rearrangement, a $V_K/\text{intron-Kde}$ *IGK* rearrangement, a $V\lambda-J\lambda$ *IGL* rearrangement, a $V\beta-J\beta$ *TCRB* rearrangement, a $D\beta-J\beta$ *TCRB* rearrangement, a $V\gamma-J\gamma$ *TCRG* rearrangement, a $V\delta-J\delta$ *TCRD* rearrangement, a $D\delta-D\delta$ *TCRD* rearrangement, a $D\delta-J\delta$ *TCRD* rearrangement, a $V\delta-D\delta$ *TCRD* rearrangement, a $t(11;14)(BCL1-IGH)$ translocation and $t(14;18)(BCL2-IGH)$ translocation, using ~~at least two sets of primers~~ the kit according to ~~any one of claims 1 or 14~~ Claim 57.

38. Cancelled.

39. (Currently amended) A method according to claim ~~38-37~~ for the detection of minimal residual disease (MRD) or for identification of PCR targets to be used for MRD detection via real-time quantitative PCR.

40. (Currently amended) A method according to claim ~~38~~ or 39, wherein an amplified nucleic acid is detected using automated high resolution PCR fragment analysis.

41. Cancelled.

42. Cancelled.

43. (New) The kit of Claim 1 further comprising forward primers comprising SEQ ID NOs: 9 and 16.

44. (New) The kit of Claim 1, further comprising a set of nucleic amplification primers capable of amplifying a V_K-J_K IGK rearrangement comprising one or more forward primers of a sequence selected from SEQ ID NOs: 29-34 and one or more reverse primers of a sequence selected from SEQ ID NOs: 35 and 36.

45. (New) The kit of Claim 1, further comprising a set of nucleic amplification primers capable of amplifying a $V_K/\text{intron-Kde}$ IGK rearrangement comprising one or more forward primers of a sequence selected from SEQ ID NOs: 29-34, 38 and a reverse primer of SEQ ID NO: 37.

46. (New) The kit of Claim 1, further comprising a set of nucleic amplification primers capable of amplifying a $V_\lambda-J_\lambda$ IGL rearrangement comprising one or more forward primers of a sequence selected from SEQ ID NOs: 39 and 40 and a reverse primer of SEQ ID NO: 41.

47. (New) The kit of Claim 1, further comprising a set of nucleic amplification primers capable of amplifying a $V\beta-J\beta$ TCRB rearrangement comprising one or more forward primers of a sequence selected from SEQ ID NOs: 42-64 and one or more reverse primers of a sequence selected from SEQ ID NOs: 65-77.

48. (New) The kit of Claim 1, further comprising a set of nucleic amplification primers capable of amplifying a $D\beta-J\beta$ TCRB rearrangement comprising one or more forward primers of a sequence selected from SEQ ID NOs: 78 and 79 and one or more reverse primers of a sequence selected from SEQ ID NOs: 65-77.

49. (New) The kit of Claim 1, further comprising a set of nucleic amplification primers capable of amplifying a $V_\gamma-J_\gamma$ TCRG rearrangement comprising one or more forward primers of a sequence selected from SEQ ID NOs: 80-83 and one or more reverse primers of a sequence selected from SEQ ID NOs: 84 and 85.

50. (New) The kit of Claim 1, further comprising a set of nucleic amplification primers capable of amplifying a V8-Jδ TCRD rearrangement comprising one or more forward primers of a sequence selected from SEQ ID NOs: 86-91 and one or more reverse primers of a sequence selected from SEQ ID NOs: 92-95.

51. (New) The kit of Claim 1, further comprising a set of nucleic amplification primers capable of amplifying a Dδ-Dδ TCRD rearrangement comprising a forward primer of SEQ ID NO: 96 and a reverse primer of SEQ ID NO: 97.

52. (New) The kit of Claim 1, further comprising a set of nucleic amplification primers capable of amplifying a Dδ-Jδ TCRD rearrangement comprising a forward primer of SEQ ID NO: 96 and one or more reverse primers of a sequence selected from SEQ ID NOs: 92-95.

53. (New) The kit of Claim 1, further comprising a set of nucleic amplification primers capable of amplifying a Vδ-Dδ TCRD rearrangement comprising one or more forward primers of a sequence selected from SEQ ID NOs: 86-91 and a reverse primer of SEQ ID NO: 97.

54. (New) The kit of Claim 1, further comprising a set of nucleic amplification primers capable of amplifying a chromosomal translocation (11;14)(BCL1-IGH) comprising a forward primer of SEQ ID NO: 98 and a reverse primer of SEQ ID NO: 21.

55. (New) The kit of Claim 1, further comprising a set of nucleic amplification primers capable of amplifying a chromosomal translocation t(14;18)(BCL2-IGH), comprising one or more forward primers of a sequence selected from SEQ ID NO: 100-109 and a reverse primer of SEQ ID NO: 21.

56. (New) The kit of Claim 1, further comprising one or more primers sets of SEQ ID NOs: 111 and 112, SEQ ID NOs: 113 and 114, SEQ ID NOs: 115 and 116, SEQ ID NOs: 117 and 118, and SEQ ID NOs: 119 and 120.

57. (New) The kit of Claim 1, further comprising forward primers comprising SEQ ID NOs: 29-34, 38-40, 42-64, 78-83, 86-91, 96, 98, 100-109 and reverse primers comprising SEQ ID NOs: 35-37, 41, 65-77, 84, 85, 92-95, and 97.

58. (New) The kit according to Claim 57, further comprising primers comprising SEQ ID NOs: 111-120.

59. (New) A method for detecting a D_H-J_H *IGH* rearrangement, comprising using the kit according to Claim 1 in a nucleic acid amplification assay, preferably a PCR assay, more preferably a multiplex PCR assay .

60. (New) A method for the detection of minimal residual disease (MRD) or for identification of PCR targets to be used for MRD detection via real-time quantitative PCR comprising utilizing the primers of the kit of Claim 1.